



SED Systems Selects ICT's Hot-Swap DC Power System to Provide Specialized Power for Satellite Communication Systems

ICT's Modular Power Series DC rectifier system with remote monitoring and control reduces operating costs and enhances quality of service for SED Systems' customers.

Using Remote DC Power Management Over Ethernet to Control Satellite Communications Sites

Company
SED Systems
Saskatchewan, Canada

Business Need
Provide a proactive approach to managing power conditions at unmanned communications sites

Solution
ICT's Modular Power Series DC power system with built-in Ethernet communications and lead distribution provided remote monitoring and the ability to shut down and power cycle connected network devices.

- Business Benefits**
- ▶ Reduced operating costs
 - ▶ Proactively monitor power conditions
 - ▶ Increased network uptime



Business Challenge

Satellite communication systems are used to provide communications and hi-speed internet service to customers by utilizing satellite technology. Data is sent from land-based communication systems to satellites in Earth's orbit, which is then sent back to Earth. These systems require specialized DC power plants to provide power to various components within the land-based communications system.

These satellite communications sites are often autonomous and unmanned. It is not essential to have personnel present at the site, and operating costs are reduced when operating autonomously. As these sites are unmanned, a way of remotely monitoring DC power conditions at the site is required to identify any potential issues that may occur.

“ICT was able to provide a power supply with built-in communications capabilities all in one package.”

- John Franz, Engineer, SED Systems

Business Solution

For these unmanned sites, adding the ability to monitor and control the DC power conditions at a site can significantly reduce operating costs. Previously, any issue with power at a site required a visit to the site to correct the issue. The ability to remotely monitor and control power provides a more proactive approach to managing power and helps to avoid power outages by providing early identification of device failures.

SED Systems began using ICT's Modular Power Series DC power system with built-in load distribution modules and communication via Ethernet. The Modular Power Series from ICT enabled SED Systems to remotely connect to the DC power system to monitor and control power conditions at communication sites. The built-in load distribution module allows for individual loads to be monitored and power cycled if required. All of this monitoring and control functionality is available via a web-based browser.

With remote monitoring and control of DC power conditions at a site, issues can often be resolved by simply power cycling DC power to troublesome network devices. This reduces the need to send a technician to a site if an issue occurs. This also allows an issue to be corrected in a timely manner which reduces operating costs and increases network uptime and quality of service for users of the communication system.

Business Outcome / Benefits

For SED Systems, the benefits to this approach are:

- ▶ Ability to monitor DC conditions at a site, including battery voltage, load conditions, AC mains availability; and the ability to remotely power cycle connected devices
- ▶ Reduced number of site visits for technicians reduces maintenance and operating costs
- ▶ Increased uptime of system and enhanced quality of service to customers

“In the past, any time something would go wrong we’d have to send a service technician to the site to try correct the issue.”

- John Franz, Engineer, SED Systems

About SED Systems

SED Systems is a leading systems engineering firm providing systems, products and services used in communications, test and control applications. SED Systems’ primary market is the global satellite communications sector, serving satellite manufacturers, operators and internet service providers around the world. SED is a division of Calian Ltd., a subsidiary of Calian Group Ltd.

For more information please visit: www.sedsystems.ca

About ICT

ICT is a leading manufacturer of power conversion products for land mobile radio, fixed wireless broadband and industrial power markets. Our power solutions help improve uptime, reliability and quality of service, reduce operating costs, and provide remote power monitoring and management of connected loads over Ethernet, often reducing unnecessary visits to remote sites.